

# MoDOT Workforce Planning Key Components

## Human Resources – Training Delivery

February 18, 2011

**Executive Summary:** Training Delivery is a critical function performed by the Central Office (CO) Human Resources (HR) Division. It includes the delivery of all internally developed or vendor led training programs for which the HR Division is responsible and includes administration of the Learning Management System (LMS). Training delivery of compliance and technical training is done in partnership with district SMEs who provide compliance and technical training at the local level that supports the department's mission and delivery of the tangible results. Performance of this function requires approximately 15 FTEs on an annual basis at a cost of approximately \$1,067,000 in total personal services costs (salary and fringe benefits). Current direct E&E expenses expended to support this function are approximately \$137,000 annually. Indirect E&E expenses, including computers and other hardware and software expenses, are paid by IS.

Our initial assessment revealed that this function could be outsourced because there are external resources available to perform similar work. Our preliminary estimation is the cost for consulting work would be in the range of approximately \$1.37 million per year. However, this figure does not include the additional costs we'd be billed to cover the vendor's extensive statewide travel, which would drive the total cost up significantly. Our assessment further revealed that the function could be streamlined by mandating regional classes for the soft skills and maintenance courses; offering video conferencing/webinars for compliance and soft skills training; and moving to online manuals and training materials which would completely eliminate printing costs.

Please use the questions below for each function and summarize the information within the final business plan.

- ***Why does this function exist within MoDOT?***

This function exists to ensure necessary courses are delivered and tracked. Training provides staff with ongoing knowledge and skill development, which is vital to MoDOT delivering its tangible results.

- ***What does this function accomplish?***

- Compliance Training

- New Employee Orientation (NEO) provides new employees with an overview of MoDOT's mission, structure, and history; benefits provided to MoDOT employees; an overview of the MoDOT employee handbook; and mandatory segments on drug and alcohol awareness.

- Supervision/Management Training

- MoDOT's supervisors and managers learn what is expected of them and how to successfully manage people and processes, new techniques, and receive tips that will help them be more successful managers/supervisors, and how to comply with applicable laws and departmental policies.

Soft Skills Training

Soft skills training exposes staff of all levels to best practices and provides them with tips, tools, and techniques to help them communicate and work more effectively with their partners and customers.

Maintenance Training

Maintenance training provides personnel with high-level guidance on how to operate highway maintenance equipment safely and basic operational information.

- ***How does this function add value?***  
Ongoing training delivery provides for a well trained workforce.
- ***Is this function core (i.e., mission critical in helping achieve the Tangible Results)?***  
Yes, training delivery and tracking are core functions for HR. MoDOT cannot meet its tangible results or achieve its mission without a highly-trained workforce that incorporates new best practices. We must have a training tracking mechanism to identify where there are gaps in training so it can be delivered in a timely manner.
  - ***Does this function need to be provided on a continual basis?***  
Yes, training delivery needs to be provided on a continual basis because we have newly hired and promoted staff who must be trained to minimum standards and tenured staff who need to learn the newest processes/procedures and how to safely operate new versions and types of equipment. Tracking is necessary to continually identify gaps in meeting minimum training requirements.
  - ***Would loss of the control of this function harm the organization?***  
Note: we interpreted “loss of the control of this function” to mean we would completely turn it over to someone outside of MoDOT with little to no input. Losing control of the training delivery function could potentially have a negative impact on MoDOT, in particular as it relates to technical training delivery. In the short term, there are no known vendors who can provide all of the technical courses (45+) we currently offer or in as many locations as we offer. Courses are frequently delivered at the sheds. There would be no known harm by loss of control of training delivery for the compliance, supervisory/managerial and soft skills courses. Courses are readily available for compliance, supervisory/managerial, and soft skills courses. We currently outsource most of the supervisory and all of the management training.
  - ***Would loss of expertise have a negative impact on MoDOT?***  
There may be some negative impacts by outsourcing compliance and soft skills training, but the knowledge/skills imparted during these classes are transferable between disciplines. Policy interpretation and culture are not easily transferable, so these are the areas where the loss of expertise would be most impactful.

The program area where we'd experience the most negative impact is with the technical training. The knowledge of our maintenance training SMEs could not be fully replicated by vendors who have not performed highway maintenance functions on Missouri's roads with MoDOT equipment.

- ***Is this a function that is mandated by a federal or state law?***  
The only training that's required is *Drug and Alcohol Training for Supervisors* and *Work Zone Safety* and *Flagger* training are required for any employee working in or around a work zone.
- ***What would be the perception of MoDOT's customers?***  
Customers expect that employees know how to perform their jobs (and therefore expect them to be properly trained), but are not likely concerned with the delivery methods. However, they do expect best value.
  - ***In the minds of the general public, is this function something MoDOT should be leading?***  
It is not likely that tax payers think about the method of training delivery. They expect MoDOT's workforce to do its job competently, effectively, efficiently and timely.
  - ***What impression does this function leave with the general assembly or other critical political influences?***  
The General Assembly may view this as a duplication of function and effort with the rest of state government or may question the level of effort expended towards this function at MoDOT.
  - ***What customers use or have access to this function? Does the customer depend solely on this function?***  
No external customers rely on Central Office HR for training delivery.
- ***Availability of this function outside of MoDOT***
  - ***What is the availability of this activity in the private sector?***  
Compliance, supervisory/management, and soft skills training are readily available in the private sector. All of this training could also be provided by OA or other state agencies. There are vendors (e.g., LTAP) that can provide some, but not all of the technical courses (45+) we currently offer or in as many locations as currently provided.
  - ***How difficult would it be for MoDOT to find an adequate vendor?***  
MoDOT has adequate vendors already for supervisory and management training delivery. It would not be difficult for MoDOT to find adequate vendors for soft skills and compliance training delivery. It would be more difficult to find adequate vendors for technical training delivery. The number of vendors that can provide some of the technical courses we currently offer is very limited. For instance, LTAP provide some training for city and county personnel but is not currently able to provide all of the technical courses (45+) we currently offer or in as many locations as we offer. MoDOT's experience with vendor-provided technical training has been less than satisfactory (short-cutting content and little hands on learning provided to participants).
  - ***Is there enough competition to ensure quality?***

There is plenty of competition for the delivery of soft skills, management, supervisory, and compliance training. MoDOT currently utilizes outside vendors to deliver its managerial and supervisory training. As noted above, the quality of vendor-provided technical training is questionable.

- ***Availability of this function inside MoDOT***

- ***What are the current staffing levels supporting this function?***

- Compliance

- Currently, .5 FTE in Central Office and .15 FTE in the districts deliver compliance training.

- Management/Supervisory

- HR has .5 FTE in supporting the managerial and supervisory training contracts.

- Soft Skills

- HR has .20 FTE delivering soft skills training courses to MoDOT staff at Central Office and in the districts.

- Maintenance/Technical

- HR has 2.0 FTEs dedicated to delivering maintenance courses to department personnel. In addition, the districts have 359 SME trainers they rely on to provide the core maintenance courses to new staff, just-in-time. The SMEs trained 900 classes in FY10, the equivalent of 7.5 FTEs.

- LMS

- HR has 1.0 FTE supporting the LMS. There are an additional 3.0 FTEs who administer the LMS in the districts and divisions.

- ***Are there overlaps or duplications of staff or processes?***

- Both Central Office and a few districts provide compliance training. Both Central Office and the districts provide the technical training delivery for maintenance staff. Whether the technical course is delivered by Central office staff or district staff is dependent upon the course content. Some employees seek external soft skill training that may be duplicative of the courses MoDOT offers. There is also some duplication of effort regarding the management of training data, as there are LMS Administrators in each district and in most of the divisions.

- ***How closely does the function need to be to the end-user or customer?***

- Training delivery must be close to the end-user/customer.

- ***How easily could major changes occur?***

- Some changes could occur very easily while others would be more difficult to accomplish.

- ***Could the function be eliminated completely and if so how easy would it be to do?***

- The training delivery function cannot be eliminated if MoDOT wants to continue meeting its mission and tangible results, while having staff compliant with applicable state and federal laws.

- ***If the function is still needed, but not necessarily with MoDOT resources, how easy would it be to implement converting to managing consultants versus managing people?***

Compliance

It would be very easy to change compliance training delivery to consultant/on line delivery.

Supervisory/Management

Most of the supervisory/managerial coursework is currently provided by vendors, so there would be little to no change for this type of training.

Soft Skills

It would be very easy to change soft skills training delivery to consultant/on line delivery.

Maintenance/Technical

This training content area would be the most difficult to outsource, since there are a very limited number of vendors available to provide the variety of courses CO HR staff and SMEs currently deliver.

- ***Explain any significant and compelling reasons to continue doing this function specifically using MoDOT resources?***

Compliance and Soft Skills

There are no compelling reasons to continue doing compliance and soft skills training with MoDOT resources. However, our initial assessment is that doing the work with external resources will be at a higher cost.

Supervisory/Management

Outsourcing is not an issue as the majority of supervisory/managerial training is currently being outsourced.

Maintenance/Technical

MoDOT's current training delivery process ensures training takes place as close to the end user as possible and in a timely manner. The subject matter expertise of MoDOT's trainers cannot be easily replicated. There are a very limited number of vendors available to provide the variety of courses CO HR staff and SMEs currently deliver, so outsourcing this function would be problematic, at least in the short term.

- ***Could it be implemented regionally?***

Compliance

MoDOT currently offers some compliance courses regionally and can explore this option moving forward.

Supervisory/Management

MoDOT currently offers some supervisory/management courses regionally.

Soft Skills

Most soft skills courses are delivered in the districts by Central Office staff. However, based on partner needs, soft skill courses have been regionalized in the past and could be in the future.

Maintenance/Technical

Most technical courses are delivered in the districts. However, based on partner needs, technical courses have been regionalized in the past and could be in the future.

- ***Could it be centralized?***

Compliance

Currently, the majority of compliance training is centralized with a few districts offering their own compliance training. Compliance training could also be offered via online courses.

Supervisory/Management

Currently, the majority of supervisory/management training is centralized.

Soft Skills

The majority of soft skills training is centralized with a few districts offering their own soft skills training or employees attending vendor-providing training. Training could also be offered via online courses on a limited basis, dependent upon availability of purchased licenses.

Maintenance/Technical

Delivery of all maintenance/technical training could be centralized; however it would take much longer to deliver training since fewer trainers would be available.

- ***What are the significant barriers prohibiting MoDOT from moving forward? How will this affect MoDOT in terms of:***

- ***Government regulations***
- ***Changing economy***

Note: We're interpreting this question as barriers that prevent us from moving forward with outsourcing training delivery. The only barriers are the increased costs associated with outsourcing the soft skills and technical skills courses and the availability of a vendor to provide the variety of technical courses currently offered.

- ***Change in technology***

There are no significant barriers to changes in technology as it relates to training delivery. Delivery of additional training through online methods may require additional IT infrastructure investment and ongoing technical support.

- ***Government regulations***

There are no significant barriers to changes in government regulations as it relates to training delivery.

- ***Changing economy***

It is not anticipated that changes in the economy would impact the ability to obtain vendors to provide training delivery services. Changes in MoDOT's internal operating budget may make it more difficult to move to vendor-provided training delivery.

- ***Explain the current state of daily operation of the function –location, equipment needed, number of people needed:***

There are 15 FTEs in MoDOT's Central Office and district offices that support this function (4 FTEs support LMS and 11 FTEs provide training delivery).

- ***Describe the locations of buildings, etc.***

Employees who delivery training are housed in the HR Division at Central Office and at district offices and maintenance facilities statewide.

Compliance/Soft Skills

Training is performed at MoDOT facilities by MoDOT trainers. Equipment includes tables and chairs; a computer; LCD projector; PowerPoint presentation and handouts.

Supervisory/Management

The majority of supervisory/managerial training is performed at hotels by vendors. Equipment includes tables and chairs; a computer; LCD projector; PowerPoint presentation and handouts.

Maintenance/Technical

Training is performed at MoDOT facilities by MoDOT trainers. Equipment includes tables and chairs; a computer; LCD projector; mobile computer lab and/or other job aids for demonstration purposes; PowerPoint presentation and handouts. Heavy equipment is provided for hands-on learning.

- ***Are the facilities leased or owned?***

The hotels are contracted facilities. Most of the MoDOT training sites are owned facilities.

- ***Explain any identified opportunities for more efficient processes.***

For all of the course types, MoDOT could implement the blended learning format, where learners are responsible for completing some preparatory work on their own before class. For the multiple day courses, participants would probably have homework to complete, before returning to the classroom and follow up work after the class concluded. MoDOT could mandate regional classes for the soft skills and maintenance courses. MoDOT could offer video conferencing/webinars for compliance and soft skills training. MoDOT could change to online manuals and training materials, which would eliminate most of the printing costs. MoDOT could reduce the number of required courses for seasonal/temporary employees. MoDOT could limit the delivery cycle for soft skill electives and non-mandatory technical courses. MoDOT could centralize data entry for LMS.

- ***Explain the federal and state laws surrounding the function:***

OA's regulations require new managers and supervisors to complete 40 hours of job related training within the first year of being placed in a supervisory position. Thereafter, managers and supervisors need to complete at least 16 hours of job related training each fiscal year. Drug/Alcohol training is required for all supervisors. The federal government requires staff that work in or around work zones to have completed work zone safety and flagger training. While not required, providing EEO training is highly recommended to reduce liability.

- ***Licensing and bonding requirements,***

There are no licensing and bonding requirements that are applicable.

- ***Health, workplace, or environmental regulations, and***

There are federal DOT regulations related to drug and alcohol policy administration.

- ***Special regulations and special insurance coverage.***

There are no special regulations or special insurance coverage that is applicable.

- ***Further detail the personnel resources attached to the function:***

- ***Number of employees and type of labor (skilled, unskilled, professional),***

There are 15 FTEs in MoDOT's Central and District offices that support this function (4 FTEs support LMS and 11 FTEs provide training delivery). Of the FTEs, 3 FTEs are technician/office support, 4.5 FTEs are professional, 7.5

FTEs are a blend of professional/skilled (i.e. maintenance crew leader level).  
Fifteen FTE's – Average salary/fringe benefit additive = \$71,143 x 15 = \$1,067,000.

- ***Quality of existing staff, and***  
Based on trainer feedback data, the quality of existing trainers is very high.
- ***Number of contract workers.***  
The Missouri Leadership Group employs three trainers for the *Introduction to Supervision* course. They employ three trainers for the *High Performance Supervision* course and employ two trainers for the *Management Development Institute*.
- ***Explain the types of expenses this function creates:***  
HRED's total E&E expense is \$200,712 of which \$9,350 is for travel. See below for costs related to training materials and supplies.
  - ***Inventory of raw materials, supplies, finished goods,***  
Minimal supplies are kept on hand. We only have a few copies of older materials that aren't requested very often. In an effort to reduce waste and the associated cost, we've gone to just-in-time printing. The districts/divisions place their training needs request at least two weeks in advance and we print the materials for that class. The cost to produce training materials using HRED's copier in FY10 is estimated at \$12,000. GS' copy service also produced training materials for HR at an estimated cost of \$32,000. The districts printed a small amount of training materials and that cost has been estimated at \$2,000. The combined printing expense is estimated at \$46,000, which is significantly cheaper than the \$105,000 it would have cost MoDOT if OA had printed 420,000 pages of training materials for us. HR's training related administrative supplies is estimated at \$10,000. In May, 2010, IS purchased HRED's copier at a cost of \$18,000. This amount included one year of maintenance. The maintenance agreement cost that is due May 1, 2011 will be \$1,250 which will be paid by IS. The estimated vendor cost to provide the same number of courses as done internally is approximately \$1.37 million. This amount does not include any materials costs, travel expenses or miscellaneous expenses. In FY10, MoDOT paid the Missouri Leadership Group \$164,000 to deliver eight, weeklong sessions of *Introduction to Supervision*; two weeklong sessions of *High Performance Supervision*; and four weeklong sessions of the *Management Development Institute*.
  - ***Average value of inventory including seasonal buildups,***  
MoDOT keeps very little inventory build-up for the training delivery function.
  - ***Equipment, and***
    - Compliance/Soft Skills  
Equipment includes tables and chairs; a computer; LCD projector; PowerPoint presentation and handouts.
    - Supervisory/Management  
Equipment includes tables and chairs; a computer; LCD projector; PowerPoint presentation and handouts.
    - Maintenance/Technical



Equipment includes tables and chairs; a computer; LCD projector; mobile computer lab and/or other job aids for demonstration purposes; PowerPoint presentation and handouts. Heavy equipment is provided for hands-on learning.

- ***Capital improvements.***

There are no capital improvement expenses related to training delivery that are not accounted for by GS.

- ***Explain your major assumptions.***

We only addressed training delivery performed or led by the CO HR division. We did not address other training that is delivered within MoDOT.

We assumed MoDOT will continue to provide training in each of the topical areas to its staff.

MoDOT will still have a desire and a need to track training of its employees.

The districts will continue printing some of the training materials for their staff.